

Table 9
SAT Soil Analytical Results Summary (Radioisotopes)
Niagara Falls Boulevard Radiological Site
Niagara Falls Boulevard, Niagara Falls, New York

Location ID#	S01			S02			S03			S04			S05			S06			S07			S08			
SAT Sample ID#	S01 (30-48)			S02 (12-24)			S03 (24-36)			S04 (24-36)			S05 (6-18)			S06 (30-48)			S07 (24-36)			S08 (12-24)			
Sample Depth (inches)	30 - 48			12 - 24			24 - 36			24 - 36			6 - 18			30 - 48			24 - 36			12 - 24			
Sample Matrix	Soil			Soil			Soil			Soil			Soil			Soil			Soil			Soil			
Sample Result	Value (pCi/g)	Qualifier	Total Uncertainty	Value (pCi/g)	Qualifier	Total Uncertainty	Value (pCi/g)	Qualifier	Total Uncertainty	Value (pCi/g)	Qualifier	Total Uncertainty	Value (pCi/g)	Qualifier	Total Uncertainty	Value (pCi/g)	Qualifier	Total Uncertainty	Value (pCi/g)	Qualifier	Total Uncertainty	Value (pCi/g)	Qualifier	Total Uncertainty	
Radioisotope	EPA SSRAL																								
Uranium-238	1.5695	0.645	V	0.178	0.878	V	0.205	0.593	V	0.169	0.638	V	0.178	1.11	V	0.252	1.14	V	0.241	1.37	V	0.271	1.71	V	0.314
Thorium-230	0.904	0.685	V	0.187	1.12	V	0.250	1.28	V	0.27	0.956	V	0.21	0.887	V	0.215	1.55	V	0.312	2.19	V	0.47	2.34	V	0.401
Uranium-233/234	1.362	0.621	V	0.175	1.05	V	0.228	0.697	V	0.186	0.597	V	0.172	1.05	V	0.244	1.2	V	0.246	1.41	V	0.275	1.76	V	0.319
Radium-226	1.15	0.759	V	0.238	1.09	V	0.249	0.986	V	0.23	0.927	V	0.27	1.79	V	0.335	1.14	V	0.276	1.17	V	0.276	2.81	V	0.517
Thorium-232	0.9924	0.806	V	0.203	1.64	V	0.310	1.07	V	0.245	0.956	V	0.21	1.28	V	0.264	1.95	V	0.357	4.17	V	0.689	3.14	V	0.482
Radium-228	1.6	1.11	V	0.272	1.7	V	0.317	1.29	V	0.296	1.61	V	0.378	3.05	V	0.502	1.86	V	0.361	1.48	V	0.282	5.1	V	0.803
Thorium-228	1.1005	0.751	V	0.196	1.53	V	0.300	1.05	V	0.24	0.936	V	0.208	1.51	V	0.292	2.08	V	0.374	3.92	V	0.665	4.04	V	0.571
Uranium-235/236	0.07915	ND		0.153	V	0.091	ND			ND			0.0453	V		0.101	V	0.0737	ND			ND			
Location ID#	S16			S09			S10			S11			S12			S13			S14			S15			
SAT Sample ID#	S16 (12-24)*			S09 (24-36)			S10 (24-36)			S11 (18-24)			S12 (24-36)			S13 (24-36)			S14 (24-36)			S15 (24-36)			
Sample Depth (inches)	12 - 24			24 - 36			24 - 36			18 - 24			24 - 36			24 - 36			24 - 36			24 - 36			
Sample Matrix	Soil			Soil			Soil			Soil			Soil			Soil			Soil			Soil			
Sample Result	Value (pCi/g)	Qualifier	Total Uncertainty	Value (pCi/g)	Qualifier	Total Uncertainty	Value (pCi/g)	Qualifier	Total Uncertainty	Value (pCi/g)	Qualifier	Total Uncertainty	Value (pCi/g)	Qualifier	Total Uncertainty	Value (pCi/g)	Qualifier	Total Uncertainty	Value (pCi/g)	Qualifier	Total Uncertainty	Value (pCi/g)	Qualifier	Total Uncertainty	
Radioisotope	EPA SSRAL																							Background - 9750 Niagara Falls Boulevard	
Uranium-238	1.5695	0.962	V	0.237	1.75	V	0.309	0.999	V	0.233	1.11	V	0.242	1.15	V	0.267	0.697	V	0.194	1.35	V	0.29	0.911	V	0.215
Thorium-230	0.904	1.39	V	0.260	2.09	V	0.365	0.883	V	0.229	1.01	V	0.232	1.08	V	0.243	0.719	V	0.184	0.869	V	0.215	0.799	V	0.191
Uranium-233/234	1.362	1.1	V	0.255	1.55	V	0.287	0.798	V	0.205	1.14	V	0.247	1.13	V	0.266	1.1	V	0.25	1.18	V	0.27	0.816	V	0.204
Radium-226	1.15	0.944	V	0.258	0.94	V	0.309	0.938	V	0.217	0.98	V	0.237	1.16	V	0.246	1.09	V	0.253	1.14	V	0.269	1.12	V	0.250
Thorium-232	0.9924	1.23	V	0.241	4.03	V	0.556	0.686	V	0.199	0.836	V	0.207	1.61	V	0.303	0.731	V	0.184	0.885	V	0.214	0.964	V	0.212
Radium-228	1.6	1.46	V	0.315	1.58	V	0.381	1.31	V	0.306	1.11	V	0.26	1.99	V	0.39	1.32	V	0.297	1.06	V	0.294	1.42	V	0.183
Thorium-228	1.1005	1.36	V	0.257	3.84	V	0.541	0.722	V	0.212	1.01	V	0.233	1.6	V	0.303	0.705	V	0.18	0.971	V	0.231	0.712	V	0.349
Uranium-235/236	0.07915	ND		0.0522	V	0.0523	ND																		

Notes:

V = Verified by Certified Health Physicist

ND - Non-Detect

pCi/g = picocuries per gram

µg/L - micrograms per liter.

The Environmental Protection Agency's (EPA) Site-Specific Removal Action Level (SSRAL) was based on two standard deviations above the mean site-specific background